

The Cherwell School

Opportunity, Responsibility, Excellence

Marston Ferry Road, Oxford, OX2 7EE

Telephone: 01865 558719

office@cherwell.oxon.sch.uk

www.cherwell.oxon.sch.uk

Biometric

FAQs

What is BioStore?

BioStore is a central database located within a school. It stores the information which identifies pupils uniquely for each of the applications used in a school.

BioStore requires pupils to register only once, usually by placing a finger on a fingerprint scanner, although other identification methods are available.

Why use BioStore instead of other existing identification methods?

BioStore's centralised system speeds up registration – each student needs to only register once, no matter how many applications requiring identification are in place at the school.

With a biometric system, students cannot borrow or steal credentials from each other, reducing the opportunities for bullying. For a catering solution, queues are reduced because the speed of identification is much quicker with biometrics. Students need no longer carry fobs, remember PIN numbers, or use cash to buy a meal.

Biometric systems save time and money for both schools and pupils because the need to replace lost fobs and forgotten passwords is eliminated.

Does BioStore record images of individual fingerprints?

BioStore does not store images of fingerprints on its system, and never will. Only mathematical representations of certain minutia points of a finger (where a fingerprint ridge ends or splits in two) are recorded. Typically, between ten and sixty minutia points are recorded depending on the characteristics of the finger. This mathematical data is encrypted and is called a template. The data is extremely secure in its encrypted form, and even if it were not encrypted it would be impossible to recreate the original fingerprint image from the stored data.

Is it possible to recreate a fingerprint from the data stored by BioStore?

No, the BioStore system only stores a short string of encrypted numbers, too little data for the original print to be reconstructed.

How secure is the stored data? What would happen if somebody stole it?

The BioStore database is protected by a licence key, meaning that the database and any backup of its contents can only be accessed on licensed hardware. The hardware is stored in the school's own secure facility. As such, the encrypted data is only available to the registered licensee. Even if a school's security were to be compromised and a backup of the database stolen, the encrypted data would still be unreadable, even by another school.

If I lose my bank card then it can be replaced. But I can't replace my finger. If a template is stolen, have I lost my identity forever?

The simple answer is no. The fingerprint template stored in the database is merely a string of encrypted numbers. If this string of numbers were to be removed from the database, it would be useless, because it cannot be recognised as a fingerprint. A fingerprint scanner checks for a real finger – it does not recognise a string of numbers.

Could the police or a court of law use the fingerprints stored in a BioStore database?

BioStore does not store fingerprint images. The recorded templates are comprised of a set of numbers which represent each person. This set of numbers will be unique within populations of hundreds, or a few thousands, of people. However, in a wider population the system is not accurate enough for the templates to be usable for forensic matching with any degree of certainty. A court of law would not be able to use this information as evidence.

What happens about twins, or someone who has hurt their finger?

Even identical twins have different fingerprints, and will not be mistaken for each other by BioStore. In very rare cases there are people who are born without fingerprints. Occasionally someone's fingerprint may deteriorate because of exposure to some chemical products, and sometimes temperature changes can cause reduction in fingerprint quality. However, a cut finger would not cause any problem for BioStore, unless it resulted in major disfigurement.

Is there any alternative for pupils who are unable to provide biometric data for some reason, such as a disability?

Alternative identification methods, such as smart cards and name and photo identification, are always available in BioStore systems. Pupils unable to provide biometric data can opt to use one of these methods, as can any pupil who prefers not to use biometrics.

If I object to my child being fingerprinted, what will happen?

The school will issue any pupil who wishes to opt out of the biometric system with a PIN number to use as an alternative.
